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ABSTRACT

This report on a visit to the People's Republic of China in April 1985 to explore methodology of sports science research, treatment of injuries, and role of sports in everyday life discusses the following topics: (1) introduction to China; (2) sports and physical culture; (3) sports medicine and rehabilitation; (4) health factors; (5) cost of medical care; (6) salaries; (7) exercise; (8) liangong exercises; (9) sports medicine research; and (10) general cultural observations. (JD)

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SPORTS MEDICINE IN CHINA

BY

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SPORTS MEDICINE IN CHINA

INTRODUCTION

The purpose of the trip to the People's Republic of China was to participate in technical exchanges with Chinese counterparts in the area of sports medicine. Upon the invitation of the Chinese Medical Association, the Citizen Ambassador Program of People to People International, under the leadership of Dr. John Bergfeld, President of the American College of Sports Medicine, invited active Fellows of the College to join in the project.

Two weeks, in April 1985, were spent in visiting major medical centers, research and training centers in the areas of sports and medicine, in order to discuss the status of science and technology in the United States and oberserve first hand, the practices being conducted in China. Cities visited for informational exchange included Beijing, (Peking) Shanghai and Guangzhou (Canton). In each of these cities, we explored the methodology of sports' science research, the actual treatment of injuries and role of sports in the every-day lives of Chinese men and women.

The paper will present an overview of demographic dimensions, history, health, research and education as it relates to sports training or, as it is called, "physical culture".

INTRODUCTION TO CHINA

Prior to our departure from Seattle Washington, we were briefed by a Chinese professor Dr. Lo from the University of Washington. Major changes which have occurred recently, we were informed, were: one child per family, reduction in import duty and private ownership, especially of farms. They were seeking a free economy. Modernization is being encouraged and achievement in sports is highly desired. This was evident when we visited the Sports College in Beijing where the leader proudly showed off a wall full of trophies in glass cases. Japan appears to be the major rival in the sports arenas.

Ultruistic goals for the people of China are to:

1. Obtain self discipline
2. Obtain harmony in the family
3. Get the country in order
4. Pacify the world

These noble goals which are appropriate for all nations, start with control of self and lead to improving the world.

The first impression gained was the importance and concern for us as visitors as we parted the Bamboo curtain which had for so many years been totally closed to outsiders. Because one must be invited to enter the country, it was considered a privilege and we were, indeed, treated as

invited guests. Our hosts, the Chinese Medical Association, is comprised of 41 organizations and 81,000 members. In addition to being welcome, at every formal meeting, the leader of the Chinese group, whether at the hospital, research or sports training centers, informed us of the progress made since 1949 when the People's Republic of China (PRC) was first established. Their growth and development started essentially at the end of the Great, Proletarian, Cultural Revolution (1966-1971) during which all the cultural academic and intellectual development was banished including books, colleges, and even leaders in all intellectual fields. Because of the lost time, this nation of over one billion is trying desperately to catch up to the wide world of technology yet retain its cultural integrity. For this reason, professional guests, especially from the United States of America, are most welcome.

Red is the color of the Chinese flag with five yellow stars, one large and four small in the upper left corner. Symbolically, the four stars represent the workers, peasants, soldiers and national capitalists whereas the large star is a symbol of the Communist Party.

China is the third largest country in geographical size with the USSR and Canada preceeding and the United States following China. The population of the three cities which we visited are: Beijing, the capitol, population of 7.6 million; Shanghai, the largest population of 11 million, and Guangzhou, population of 5.2 million (U.S. Department State 1984).

In 1984, the population was estimated to be 1,036,040,000 people based on sample surveys (Beijing Review, 1985). With such large numbers we can understand more readily the teeming masses of people we encountered when in the business sections of these cities. It was not the place for one with agoraphobia.

Eighty-five percent of the land is agricultural in contrast with the United States of America which is less than 4% agrarian. Eighty per cent live in rural areas. The GNP is $300 per year per person; whereas in the United States it was $12,820 per year in 1981. Food products consist of rice, wheat, other grains and cotton. Once we left the city, miles of rice paddies with barefoot workers hoeing in the water or being led by water buffaloes stretched before us. Tiny, primitive shacks which were houses for the rice farmers, were evident next to the paddies.

Few restrictions were placed upon us as we traveled through each of the cities. Requests were made by Chinese national leaders that we do not film any airports or naval vessels in Shanghai harbor. Walking early in the morning in Beijing, I saw guards at all the government apartments within a one mile radius of the modern Hotel Beijing-Toronto in which we were housed. Considering the masses of people, there were relatively few policemen or soldiers throughout the streets which were filled with bicycles. No private cars were seen, just a few taxis. At night when visiting the government-owned, foreign shopping stores, called Friendship Stores, we were amazed at the quiet, dark streets in the large city of Peking. Only the main streets were lighted. Later, in Hong Kong, we were informed that there is

a curfew for Chinese people which explained the night silence. Little attention was paid to us as we hiked, jogged, did exercises and Tai Chi in the streets. If we smiled and greeted people, there was always a warm, polite response. In the streets and in the People's Park in Shanghai, young students tried to engage us in conversation in order to practice their English. All the student materials, postcards and University of Rhode Island pins were quickly and enthusiastically received. Every student in the three major colleges which we toured, spoke of studying in the United States and was seeking financial support. This is evidently a universal problem.

SPORTS AND PHYSICAL CULTURE

There is a national Commission on Sports and Physical Culture which controls the education of teachers, athletic trainers, coaches and athletes in the country. One host leader told us there were 30 colleges (another said 13) which train these sports' leaders. Visiting the three sports' colleges in the major cities, there were similarities in the type of training which we viewed. The largest and most impressive was the Beijing Institute of Sports Science. All of our visits to colleges, hospitals and research institutes were preceded by a lecture given by the local leader. Seated in semi-circles, the Chinese delegation of 10 or 12 faced the American professionals who numbered about 30. After a description of the institution, we were guided through the classrooms, fields, gyms, labs, etc. Reconvening in the original room, the Chinese hosts were then open to questions. Some of the areas of concern by our delegation were health practices and current emphasis in sports medicine research. More interesting, were the questions the Chinese asked us. A sample of some of the questions are the following:

1. What are the priority topics of sports medicine in the United States now?

2. Have we conducted any national fitness tests on children?

3. What are the tests and the results?

4. How do we share research results with the coaches?

5. Why are the blacks such fine athletes and how come they run so fast?

At the Beijing College of Physical Education, we had a chance to see the type of training, equipment and facilities available. There were 1800 students and 104 faculty members. Students majored in coaching, athletic training or physical education teaching. The curriculum included all the basic sciences which we have and they attain an undergraduate, bachelor's degree in four years. Graduate school for a master's degree is a three year program. All receive training in gymnastics, rhythmic gymnastics (women), martial arts (such as Kung Fu, judo, karate, Wushu, Fencing), modern dance (no disco, we were told), track and field, basketball, volleyball, table tennis, soccer, swimming and field hockey (men only). All this sounds like any typical institution of higher education. However, housed on campus were children from age 6 up to adult age who live in dormitories after having been selected as potential athletes for national and international competition. These positions at the school are highly coveted. Parents are proud to have their children chosen for training and competition. Benefits of better jobs, food and housing are given to the families of the chosen trainees. If they do not compete at the anticipated level, athletes are returned to their provinces. If they are college age, they will become the physical education teachers and assigned a job on the Government's centralized placement system. After watching the performances of some children, especially in rhythmic gymnastics it became obvious just how highly trained, skilled and disciplined they are. One gym was set up and filled with as many as 20 nets as volleyball training was being conducted. The floor of one building consisted of dozens of table tennis athletes in training. Another goal is to have the Olympic Games in Beijing in the 1990's or year 2000. We were informed that in the next Olympics, China would win in volleyball and table tennis. This was a national goal.

SPORTS MEDICINE AND REHABILITATION

There are three basic types of medicine taught and practiced in China. These are: Western, as we know it, Eastern (herbal, massage and acupuncture), and East-West, a combination of the two.

According to our hosts at the hospitals, the major illness in China is cerebral vascular disease first, cancer of the esophogas second, and colon-rectal cancer, third. Interestingly, the Chinese do not have RH negative blood.

We visited the three major hospitals which have sports medicine specialists and in which athletes were being treated. Rehabilitation techniques which are used are: massage, acupuncture, electric acupuncture, laser point injection therapy, magnetic therapy, ultrasound, moxibustion, exercise and surgery. Again, as in the research labs, some equipment and faciilites were years behind ours. Testing equipment of bikes and treadmills were similar. Physician hosts listened eagerly to the orthopedic surgeons who were in our group as they explained some new methods of treatment, especially knee injuries (arthroscopy, etc.). As we traveled from patient to patient, each readily demonstrated their injury and treatment, even acupuncture being applied to buttocks and legs. After observing the athletes injuries, many of us gave them gifts of pins, postcards, or University materials which they eagerly took while offering profuse thanks.

Lighting in most stairwells everywhere was absent or consisted of one bare, 4' fluorescent bulb high above. In the hospital corridors we peered through the dimness, adjusting our eyes as we moved through, gradually realizing that people were sitting quietly along the benches awaiting treatment. Toilet facilities had no soap, toilet paper or towels. They were obviously used for basic needs only.

The two most unusual techniques employed as we westerners viewed it, were acupuncture and moxibustion. Although acupuncture was well known because there are Chinese doctors in the United States conducting such treatment, we began to better understand the extent and diversity of its use. Chinese doctors use it to relieve pain, to treat disease both chronic and acute (such as appendicitis and dysentery), as an anaesthetic, to regulate functions of the organs, to resist inflammation and fever, to promote recovery and to increase immunity (Yang, 1984). For surgical anaesthesia, the parts of the body which respond best are the appendages, and areas from the thorax up. Internal abdominal surgery is not as successful as the latter. Because not all patients can be anaesthetized in this manner, alternate treatment such as injection of pain killer is used when distress is observed.

According to traditional Chinese theory, channels of energy run through the human body. Along these channels are points which when stimulated affect a specific part of the body. Acupuncture stimulates these points by pricking them with a metal needle. Moxibustion uses heat on the skin's surface. A

new method of use of acupuncture is electrical stimulation in which a weak, electrical current runs through the acupuncture needle. "Cupping" consists of covering the needles with glass suction cups to increase circulation. Point injection therapy injects a small dose of drugs (herbs, vitamins, sedatives, various tissue fluids and medicines) into the point using the acupuncture needle. Injection of 1.5 mg of an analgesic (pethidine) in certain points may offer the same therapeutic effects as 100 mg of an intramuscular injection. Ultrasound was also used at some acupuncture points. Point laser stimulation is used to increase immunity. Point magentic therapy combines acupuncture and magnetic treatment. It can be used to treat sprains, bruises, strain of the lumbar muscles, rheumatoid arthritis and high blood pressure (Yang, 1984).

Ear acupuncture draws on traditional Chinese medicine theory that any physiological and pathological change of the viscera can be felt in certain parts of the ear. Therefore, certain diseases can be treated. More than 200 points on the ear can treat 200 diseases. According to Yang in the Report (1984), forty of these points have been proved to be effective. It is used also for diagnosis and anaesthesia. During the visit, one of our group was treated by ear acupuncture.

The most startling to observe was moxibusion, in which heat is applied to the end of the acupuncture needle by igniting wool and moxa leaves over points on the skin's surface. "Modern science has shown that moxa leaves contain volatile oil, and burning them can eliminate pathogenic strain or hinder its breeding. Sometimes moxibustion is applied together with garlic, ginger, herbal drugs or salt." (Yang, 1984, p. 26). Patients we observed

being treated for sciatica had papers placed under the needles in order to catch the ashes. One needle was injected into the left lumbar region (the pain point) and two placed in the gastrocnemeus muscle, one high near the knee and one at the achilles tendon of the left leg (acupuncture points). Each of ten treatments, one every other day, costs $.40 ($25.00 in San Francisco).

The advantages of using acupuncture and moxibustion are: it is safer for the patients with cardiovascular disease; painkilling effects of anaesthesia can last a long time; the patient regains appetite and can walk soon after surgery; fewer side-effects are seen; recovery is aided; there are fewer complications; it is quite inexpensive with less local pain; it is convenient and safe. In a study of 4,827 operations within the skull, about half the patients remained quiet and comfortable during surgery (Yang, 1984). Evidently, there are varying effects upon different patients. Pre-operative evaluation is essential with prediction of success 80% effective.

All hospital and institute rooms which we visited were quite cool, about 50 to 55 degrees Farenheit, yet all the windows were kept open. All heat had been turned off as it is illegal in China to have heat after March 15. Needless to say, the evenings and early mornings were a bit chilly. The only treatments which we saw being conducted were acupuncture, ultrasound, moxibustion, massage, neck traction and acupressure, (thumb pressure to temples, head, forehead and hands between the thumb and first finger).

In the Rehabilitation Center at the Hua Shan Hospital, Shanghai, the specialty is digit transplants. Several patients were observed with successful second toe to replace thumb transplants. Full functional ability with dexterity, feeling and strength were evident (Ruhling, 1985).

HEALTH FACTORS

Another brief observation regarding health, was the wide addiction of men to smoking strong cigarettes. An estimated 200 million Chinese smoke, we were told. Some Chinese restaurants were dim in hazy smoke. Our contingent of sports medicine proponents had difficulty eating under such conditions. The leaders at the research institutes and the newspaper China Daily informed us that cessation of smoking was a national health goal.

Reading the China Daily, which is published in English in four major Chinese cities, I saw mentioned the health problem of cigarette smoking and high rat infestation. One solution to this major health problem is to eat the rats. According to the April 6, 1985 issue, rats are: "plentiful, inexpensive, high in protein, low in fat, easy to prepare, delicious and highly nourishing. Identifying diseased animals is much easier than other animals." Although it has not yet been widely accepted, the people are urged to start moving in that direction. Snake meat was unfamiliar 10 years ago, but is now a popular food in South China (China Daily, 1985, p. 3).

COST OF MEDICAL CARE

A brief note on the cost of medical care is important. According to the Medical and Health Service in Shanghai Report (1982), free medical care is given to: "workers and staff members of industries, mines, communications, commercial enterprises, civil service and other government undertaking of science, technology, education, culture, public health, sports, as well as teachers and college students. Lineal dependents of these workers may be reimbursed for half of their medical costs." Interestingly, there is a cooperative medical care system in the commune in which each member contributes 2 to 3 yuan a year ($1.00 USA) and gets free medical care at the brigade health center. When hospitalization is required, expenses are partly or wholly defrayed by the brigade "depending on its solvency" (Shanghai Municipal Health Bureau, 1982, p. 3).

SALARIES

At the Shanghai Sports Medicine Research Institute, the subject of salary was raised. We learned that the Chief of the Sports Medicine Section at the Hospital, top orthopedic surgeon, earns $45.00 U.S. dollars per month or $540.00 per year. In comparison with other occupations, a worker earns between 45 to 70 Yuan per month or about $190 to $300 U.S. dollars per year. A physician earns 90 to 110 Yuan per month which equals $380 to $463 U.S. dollars per year; and college professors may earn 120 to 150 Yuan per month, which equals $505 to $630 U.S. dollars per year (Ruhling, 1985).

EXERCISE

If one were to make a general observation of the Chinese people everywhere, it was the importance of exercise. Not only were we shown techniques and studies at the institutes, we were bombarded daily with literally hundreds of locals lining the streets and parks at all hours but especially before work from 6:00 to 7:00 AM. The traditional exercise is Tai Chi Chen, slow, graceful, rhythmic, series of movements emphasizing flexibility, control and use of the total body. A Chinese, woman physician, whom we met in Shanghai, agreed to teach us the art form in front of our hotel at 6:00 AM on the main street of the city. Speaking English, she patiently and repeatedly led us through the movements looking like a controlled, professional dancer while we struggled valiantly along. Although most of us were regular exercisers, few of us could emulate her slow, complicated gyrations.

A newer method of exercise was researched before being taught to the people. Called Liangong, it consists of 18 specific movements incorporating all body parts. We saw the institute in which it had been devised and to my amazement, everybody was doing the series out in the streets. Much less complicated and much easier to perform than Tai Chi, I went through the set in the midst of some older Chinese people. After about 20 minutes, I noticed the gray haired woman beside me subtly trying to help me perform them correctly. She showed me the acupressure points on the hands and head and smiled when I did it correctly. The communication was so powerful, I

felt refreshed after 45 minutes of exercise. The Liangong series were performed to Chinese music emanating from a portable radio hung on a tree along the sidewalk. As far as visible were men and women in drab blues and blacks, some with white gloves, all exercising together. At 7:00 AM they chatted in small groups and went back to their apartments or on to work. One of the intrepreters informed us that there were no coffee breaks on the job. Workers stand up from their seats in the factories and do group exercises to music with a leader on a stage or on a table in the front. These are performed twice a day, in the morning and afternoon, while the radio broadcasts exercise music. There are, we were told, 30 million people performing 30-60 minutes of exercise daily at work. We have much to learn from our Oriental neighbors.

LIANGONG EXERCISES

Because of the obvious enthusiasm and national use of these 18 exercises, all of the traveling professionals were eager to acquire information on the series. Fortunately, I was able to buy an English translation, 3rd edition, which was compiled by China Sports Editorial Board, Beijing and published in Hong Kong at a research institute. We were given the People's version which was, of course, printed in the Chinese language. Basically, Liangong is a "fairly all round and systematic set of exercises for keeping the body fit and a good method of healing pains in the neck, shoulder, waist and legs. Easy to learn, these exercises when applied, (for old and young), produce remarkable results. Curative effects have been seen on cardiovascular diseases, neurasthenia, respiration and digestive disorder, neurosis, and chronic pains." (Liangong, 1983, p. 1). While such broad cures are exaggerated, it appears that the major advantage of the series of movements are for stretching, muscle tone and realigning the body parts. They are especially helpful for workers seated in one postion too long, for physical laborers, and for those with poor posture. Standing in one place, these techniques do not include basic, repetitive, cardiovascular activities. Power and strength are not involved. Stretching, twisting and bending movements from a standing position are slow, controlled and coordinated with breathing. Body areas which they concentrate upon are: neck and shoulders, back, buttocks, limbs and internal organs. While I was doing the exercises, I was impressed with their body control,

preciseness and knowledge of these movements. Most unusual of these stretching and range of motion was the final series. Acupuncture points were rubbed and kneaded going from face, to head, to abdomen, to hair. They ended with simple arm stretches. Generally, the medical group which we represented were skeptical of the much lauded results of the cures from innumerable, chronic diseases. We agreed however, that teaching 18 exercises to literally hundred of thousands of people, having them faithfully perform them daily and maintaining the general fitness level, and lack of obesity was mind-boggling. We wished for such discipline and dedication to a healthy body through exercise in our own country.

SPORTS MEDICINE RESEARCH

Specific goals differed within each of the 3 research institutes which we visited, depending upon the expertise and equipment available. In Shanghai, goals of the research hospital of the First Medical College, focused on: (1) prevention and diagnoses of chronic, athletic, soft tissue injuries; (2) application of sports medicine for prevention and treatment of coronary disease; (3) using Tai Chi sports as a measure of health promotion; (4) gymnastics treatment of athletic, flat feet and (5) rehabilitation of limb injuries (including second toe to thumb limb transplants).

Touring the research facilities in Shanghai, we found x-ray, physiology and biomechnical labs but no muscle biopsy techniques. We were told that they lacked equipment and needed USA help. Method of determining top athletes in that city were by somatotypes (bone age and total height) and measure of fitness, such as maximum oxygen uptake. All children were tested at age 7 and "gifted" athletes stayed to live at the school to study and train which takes several years. Children were trained every morning academically and every afternoon on their particular sport. Twice a week they get regular physical education for variety. Tests to measure these young athletes were: sprinting the 30 meter dash, flexibility and jumping ability. Next they were tested for percent body fat (no underwater weighing tanks were observed) and for fitness on the bike ergometer or treadmill. Computer facilities included two IBM PC's. In the research library most national and international sports medicine journals from the United States and Europe were observed. Basically, testing techniques for the parameters mentioned were similar to ours in the United States.

Our Chinese hosts expressed concern that they lacked the equipment and expertise needed to increase the range of study and were seeking ties with other countries to share research with other professionals like us. Concern was shown that Beijing was far ahead in research. When I asked what was the major health problem, the answer was "Nearsightedness" and they did not know the second.

Because the three research institutes which we visited were so diverse, a wide range of studies were seen. For example, in Guangzhou they had studied the 138 best, national weight lifters, 86% of whom had low back pain. Biomechanical studies were helping determine the causes. They are sent by the Government to the city for study. Also, in Guangzhou, we were treated to their "Magic Water", Jianlibao, produced under the supervision of Guandong Sports Medicine Research Institute. We called it our Chinese Gatorade. Official drink for the Chinese Olympic team, it is the first alkaline, electrolyte drink to be produced in China for athletes. Ingredients were: natural spring water, honey, orange juice, glucose, potassium, calcium, magnesium and sodium.

Beijing, the capitol of China, had the largest research institute and college. National Sports Medicine Research Institute founded in 1958, was the official name. The largest department was Sports Medicine, the second was the department of Exercise Physiology. One study being conducted by a woman professor of nutrition, at the Beijing 3rd Medical College, Dr. Chen Ji Di, considered the relation of nutrition to sports disease (anemia and over-training). She was an international scholar of the American College of Sports Medicine and spoke perfect English.

Labs were numerous but varied in care and use. Some new equipment was not being used, parts were missing and some in disrepair. Apparently, they lack the expertise to maintain specialized equipment. Labs included EKG, histopathology, echocardiography, aerobic testing facility, massage/ acupuncture room, and room for neck traction. (The person is hung by the neck, seated or standing with full body weight.) The professionals in our group felt that we were hurried through and had little time to question procedures. Again, the facilities were cold, damp, dark, dank and depressing. Our consensus was that such facilities in the labs and hospitals were extremely inadequate for a working environment. Poor lighting consisted of four foot long, flourescent, exposed tubing near the top of the high ceilings. Also, the bare ceilings, cold floors, inadequate sanitation facilities and bare unpainted walls, left a depressing picture, indeed.

Another observation of the labs and hospitals is appropriate here. Beijing is on a latitute in line with New York City. In the month of April, clothing of the Chinese included: men wearing shirts, heavy Mao jackets, heavy woolen slacks then covered with a white, lab coat. One female professor of nutrition, wore: a blouse, pullover sweater, cardigan sweater, sports jacket, slacks, all covered with a long, white, lab coat. (I counted three pairs of slacks protruding at the ankles on an woman doing street exercises.) At no time during our visits did we remove our outer coats or jackets. It was only the warmth, humanity, enthusiasm and graciousness of the hosts that encouraged us during our myriad of ventures through the three cities.

GENERAL CULTURAL OBSERVATIONS

A cursory observation of the Chinese people, men, women and children, is that no obesity was observed. Because of the layers of clothing, they looked a little bulky. All the physicians, professors and students biked to their work place. It is estimated that, in Beijing, there are 5 million bicycles. Other modes of transportation were buses (jam packed), three wheeled platform bikes, horse drawn wagons, some trucks and walking. The bicycles had no lights, were painted black and most people were dressed in black or navy blue. All vehicles can have only their parking lights on in order to save energy so you can imagine the congestion, trepidation and terror we felt travelling and walking at night time. Vehicles did not stop at red lights, constantly passed the median line and honked continuously in cities to let us know they were approaching. Reportedly, there are 50 accidents per month in Beijing. Why there are so few accidents is a complete mystery to me.

In the capitol city of Beijing the gray, dusty, dry bleakness appeared to be everywhere. Masks were worn by many because of the dust storms and to prevent respiratory infections from being contracted or passed to others. Few trees, flowers or green parks were seen in that drab city. In the south, Shanghai and Guangzhou were greener, less dry and healthier. Even people were dressed in more western style with occasional colors in the clothing. Everywhere, children were brightly attired or dressed in costume. Grandparents or parents held them up to be photographed or posed them for us in the parks. Many preschool children had grandparents, especially the grandfather, caring for them as both parents are expected to work.

Apartments in Beijing, we were told, can be rented for a cost of approximately $1.40 per month. They are government-owned and usually contain two rooms and a bathroom (Ruhling, 1985, p.40). The main street in Beijing is 24 miles long and absolutely straight east to west.

I would estimate the ratio of male professionals to female to be 5 to 1 based on our limited encounters. However, the workers in the streets, ditches, canals, on bikes, stores, tourist sites, etc. were both women and men. All the leaders, head physicians, college presidents and directors of research institutes were men.

In one curious custom, in English translation, the he's become she's and vice versa. In the comic strips Doonesbury and Peanuts, the oriental women calling women "sir" is not so far fetched after all.

There was little fear of physical danger for our group and the Chinese are scrupuously honest. Robbery is punishable by death, according to our guide. Because of time constraints, just a few brief comments about food will be made. We ate all meals with chopsticks and soup with a small ceramic oval spoon. One Chinese humorist joked by informing us that they were all thin because it took them so long to eat the food with chopsticks. Although lunch and dinner meals tended to be repetitious, they went to great effort to feed us with the best (and far too much) that they had available. In two weeks only two dogs were seen (sheep dogs out in the pasture) and no cats. Skinned dogs were seen for sale in the open market. No refrigeration was seen, except in our modern hotel rooms.

In retrospect, as I view my pictures and read my notes, I feel as though I stepped into a magic time machine and was transported to a fictitious land. But reality sets in as I realize that the giant nation of China is rising quickly as people strive to improve technology and the health of their citizens. It was a privilege for me to briefly observe our industrious, patient, polite, honest and intelligent, Chinese counterparts in sports medicine.

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